

REMARKS

Upon entry of this amendment, claims 19, 20 and 22-36 are all the claims pending in the application. Claim 21 has been canceled by this amendment. Applicants acknowledge that claims 23-26, 28, 30 and 32-36 have been withdrawn from consideration.

I. Objection to the Drawings

The Examiner has objected to the drawings for the reasons set forth on pages 2-3 of the Office Action. In particular, the Examiner has indicated that Fig. 20 should be identified as --Prior Art--. Applicants are submitting herewith a replacement sheet for Fig. 20 which includes the --Prior Art-- legend. Accordingly, Applicants kindly request that the objection be reconsidered and withdrawn.

II. Objections to the Specification

The Examiner has objected to the specification for the reasons set forth on page 3 of the Office Action. In particular, the Examiner has indicated that the title of the invention is not descriptive.

Applicants have amended the title in a manner to overcome this objection. In addition, Applicants note that editorial changes have also been made to the specification and abstract for grammatical and general readability purposes. No new matter has been added.

Based on the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw the objection to the specification.

III. Claim Rejections under 35 U.S.C. § 103(a)

A. Claims 19-22, 27 and 31 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Mizuno et al. (JP 2004-039068) in view of Nagai (US 6,968,563).

Claim 19, as amended, recites the feature of a base including a bottom portion, and a pair of supporting portions provided to stand on the bottom portion while being spaced apart in a direction of the optical axis, each of the supporting portions having a through hole in which the drive shaft is inserted. Applicants respectfully submit that the combination of Mizuno and Nagai does not teach or suggest at least this feature of claim 19.

With respect to Mizuno, Applicants note that this reference discloses an optical head having an aberration correction lens 4 arranged between a laser light source 3 and an objective lens 5 (see Fig. 1). In addition, as shown in Fig. 1 of Mizuno, the optical head also includes a piezoelectric element 6, a driving shaft 7, a friction support 8 and a lens holder 10.

Regarding the above-noted “bottom portion” recited in claim 19, Applicants note that in the Office Action, the Examiner has indicated that the “drive shaft (7) is supported on a base having a bottom portion (e.g., bottom of lens holder 10)” (see Office Action at page 4 with respect to claim 22). Thus, the Examiner has taken the position that the bottom of the lens holder 10 corresponds to the claimed “bottom portion” of the base.

As noted above, however, claim 19 has been amended so as to recite the feature of a pair of supporting portions provided to stand on the bottom portion while being spaced apart in a direction of the optical axis, each of the supporting portions having a through hole in which the

drive shaft is inserted. Applicants respectfully submit that Mizuno does not disclose, suggest or otherwise render obvious such a feature.

Further, with respect to Nagai, Applicants respectfully submit that this reference does not cure the above-noted deficiency of Mizuno. In particular, Applicants note that while Nagai discloses an optical head having a position detecting device 22a for detecting the position of a relay lens 33 (see Fig. 6 and col. 7, lines 33-35), that Nagai does not disclose, suggest or otherwise render obvious the above-noted feature recited in amended claim 19 of a base including a bottom portion, and a pair of supporting portions provided to stand on the bottom portion while being spaced apart in a direction of the optical axis, each of the supporting portions having a through hole in which the drive shaft is inserted.

In view of the foregoing, Applicants respectfully submit that amended claim 19 is patentable over the cited prior art, an indication of which is kindly requested.

In addition, Applicants note that claim 19 has also been amended to recite the feature of a position detection portion detecting a position of the aberration correction lens in the drive shaft direction, the position detection portion including a magnetic field generation portion and a magnetic field detection portion disposed to be allowed to undergo displacement with respect to the magnetic field generation portion in the direction of the optical axis, one of the magnetic field generation portion and the magnetic field detection portion being arranged on the base and the other of the magnetic field generation portion and the magnetic field detection portion being arranged on the lens holder.

Regarding the above-noted “magnetic field generation portion” and “magnetic field detection portion”, Applicants note that in the Office Action, the Examiner has pointed to the disclosure in Nagai which indicates that the position detecting device 22a can be composed of a magnet and a Hall element (see col. 11, lines 27-29), and has taken the position that the position detecting device 22a of Nagai includes both of the claimed “magnetic field generation portion” and “magnetic field detection portion” (see Office Action at page 5).

As noted above, however, claim 19 has been amended so as to recite “one of the magnetic field generation portion and the magnetic field detection portion being arranged on the base and the other of the magnetic field generation portion and the magnetic field detection portion being arranged on the lens holder.”

With respect to such a feature, Applicants note that while Nagai indicates that the position detecting device 22a can be composed of a magnet and a Hall element, that even when taken in combination with Mizuno, that there is no disclosure or suggestion that one of the magnet and Hall element is to be arranged on a base and the other of the magnet and Hall element is to be arranged on a lens holder. Instead, Applicants note that the disclosure in Nagai clearly suggests that both of the magnet and Hall element are to be arranged on the same element.

In view of the foregoing, Applicants respectfully submit that the combination of Mizuno and Nagai does not teach, suggest or otherwise render obvious the above-noted feature recited in amended claim 19 of a position detection portion detecting a position of the aberration correction lens in the drive shaft direction, the position detection portion including a magnetic field generation portion and a magnetic field detection portion disposed to be allowed to undergo

displacement with respect to the magnetic field generation portion in the direction of the optical axis, one of the magnetic field generation portion and the magnetic field detection portion being arranged on the base and the other of the magnetic field generation portion and the magnetic field detection portion being arranged on the lens holder.

Accordingly, Applicants submit that claim 19 is patentable over the cited prior art, an indication of which is kindly requested. Claims 20, 22, 27 and 31, as well as non-elected claims 23-26, 28, 30 and 32-36, depend from claim 19 and are therefore considered patentable at least by virtue of their dependency.

B. Claim 29 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Mizuno et al. (JP 2004-039068) and Nagai (US 6,968,563), and in further view of Ikegame et al. (US 5,875,166).

Claim 29 depends from claim 19. Applicants submit that Ikegame et al. (US 5,875,166) fails to cure the deficiencies of Mizuno et al. (JP 2004-039068) and Nagai (US 6,968,563), as discussed above, with respect to claim 19. Accordingly, Applicants submit that claim 29 is patentable at least by virtue of its dependency.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited.

If any points remain in issue which the Examiner feels may best be resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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